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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,662	01/23/2001	Algird M. Gudaitis	10002207-1	3784

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

GIBBS, HEATHER D

ART UNIT PAPER NUMBER

2622

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,662

Applicant(s)

GUDAITIS, ALGIRD M.

Examiner

Heather D Gibbs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on 08/18/04 has been entered and made of record.

Response to Arguments

2. Applicant's arguments filed have been fully considered but they are not persuasive. Applicant argues Hubble does not teach a strip having a configuration that allows each or a plurality of photodetectors to detect a discrete region of that test strip. Upon further consideration the Examiner find this limitation to be taught in Col 11 Lines 46-64. Hubble teaches, "The spectrophotometer 12 may be utilized with circuitry such as that of Fig 3, or otherwise, to accurately multiply read plural different color test patches such as 31 printed on moving color test sheets 30 as those shown in Fig. 4."

Applicant secondly argues, Hubble does not disclose an array of sensors mounted for detecting color properties of discrete areas of each test trip. Upon further consideration, the Examiner finds Hubble teaches this limitation in Col 11 Lines 46-64 when he states "there is shown a color sensing system 10 with a spectrophotometer 12..."

Lastly, applicant argues, "Hubble does not disclose discretely sensing actual color characteristics of discrete areas of a given region of a test pattern." Examiner finds this limitation to be expressed in Col 12 Lines 24-41,56-67. More specifically, "The controller 100 and/or a conventional sensor for fiduciary marks 33 or the like on each test sheet 30 can provide control or actuation signals to the spectrophotometer 12 circuitry for the spectrophotometer 12 to sequentially test or read the colors of each of the test patches 31

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on the test sheet 30 as that test sheet 30 moves past the spectrophotometer 12 in the output path 40..."

DETAILED ACTION

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-14,17,19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hubble, III et al (US 6,384,918).

Regarding claim 1, which is representative of claim 5,12,17,and 19, Hubble teaches a system for color measurement for a color hard copy apparatus, having a print media transport path, comprising: an illumination source *D1 through D10* adjacent to said path (Col 12 Lines 56-67; Col 13 Lines 1-14); a plurality of photodetectors *D12* adjacent to said path (additional detector Col 18 Lines 10-22); and a test pattern 31 on a sheet of media traveling said path 40, the pattern 31 having a geometric configuration such that each of said photodetectors detects substantially discrete regions of said pattern having a single color generated by said apparatus (Col 16 Lines 58-67; Col 17 Lines 1-14).

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Considering Claim 2, which is representative of claim 6, Hubble teaches further comprising said photodetectors having predetermined spectral responses (Col 4 Lines 53-57).

Considering Claim 3, which is representative of claim 7, Hubble teaches wherein the illumination source is broadband (Col 2 Lines 4-17).

Regarding Claim 4, which is representative of claim 8, Hubble discloses further comprising a white calibration target mounted within the field of view of all of said sensors (Col 18 Lines 28-40).

Regarding claim 9, Hubble teaches a method for measuring actual color produced by a color hard copy device comprising the steps of: a) illuminating with broad band light, a region of a color test pattern generated by the device, wherein said region has a first color generated by the device (Col 2 Lines 4-17; Col 12 Lines 56-67; Col 13 Lines 1-14); b) discretely sensing actual color characteristics of individual areas of said region (Col 13 Lines 23-48); and c) storing data representatives of said color characteristics (Col 13 Lines 49-57).

Considering claim 10, Hubble teaches comprising the further steps of printing a plurality of intended colors in addition to said first color with said device, and repeating steps a)-c) for each of the plurality of intended colors than said first color (Col 4 Lines 45-57).

Regarding claim 11, Hubble teaches comprising the further steps of: prior to steps a)-c), calibrating each of said sensors using a white calibration target (Col 18 Lines 23-27).

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Considering claim 13, Hubble teaches further comprising an illumination source positioned to project incident light to illuminate each test strip as that test strip passes within view of the sensor array (Col 12 Lines 56-67).

Regarding claim 14, which is representative of claim 20, Hubble teaches wherein each sensor comprised a photodetector operable to measure a spectral characteristic of each test strip as the test strip passes within view of the sensor array is a photo (Col 12 Lines 29-38).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-16,18,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hubble, III et al (US 6,384,918) in view of Lloyd et al (US 5,508,826).

Hubble discloses the apparatus as discussed above.

Hubble does not disclose expressly comprising a means for comparing measure spectral characteristics of the test strip with intended spectral characteristics of the test strips and means for generating correction factors based on the comparisons for use by the printing engine.

Lloyd discloses a processor that uses the calibration source file data 225 to generated the color correction look up table by performing first or second-order chi-squared polynomial fits on the data in the calibration source file. The color correction look-up table

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converts each of these standard RGB color densities to appropriate cyan, magenta, yellow and black ink primary-filter densities, using the calibration step 58 (Col 8 Lines 34-67)

Hubble & Lloyd are combinable because they are from the same scope of nature.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Lloyd with Hubble.

The suggestion/motivation for doing so would have been to accurately reproduce color images.

Therefore, it would have been obvious to combine Lloyd with Hubble to obtain the invention as specified in claims 15-16,18,21.

Claim Informality

5. Claim 16 is objected to because of the following informalities: delete second use of phrase "for use". Appropriate correction is required.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant

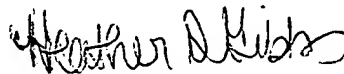
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to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D Gibbs whose telephone number is 703-306-4152. The examiner can normally be reached on M-F 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Heather D Gibbs
Examiner
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hdg

